

# Trade & Industry Times

*A publication for Indiana's Career & Technical Educators*

*Indiana Department of Education  
College and Career Preparation*

## Of Interest

- Happenings
- Resource Links.
- Upcoming Events
- Student Opportunities
- Online Resources
- This year's IACTED Conference
- Career Pathways Update

Please submit suggested educational resource links and story items to Career Specialist Davis Moore at [dmoore@doe.in.gov](mailto:dmoore@doe.in.gov)

## Finding the Mathematics in Trade and Industry

While students were relaxing during summer vacation, some Career and Technical Education and Mathematics instructors were hard at work.

64 CTE and Math instructors participated in the Math-in-CTE Summer workshop July 12th-16th at the J Everett Light Career Center in Indianapolis, Indiana.

During the weeklong workshop instructors worked in 2 to 3 person teams to develop lesson plans that emphasized the mathematic components of CTE Courses.

CTE Instructors in the areas of Automotive Services, Building Trades, and Health Sciences teamed up with Math instructors to develop the lesson plans using the Math-in-CTE model, a methodology for curriculum integration created by the National Research Center for Career and Technical Education.

This is the second year for the program in Indiana. Outside of the five day Summer Workshop, the instructors will come back to revise the lessons they created during mini sessions in the Fall and Spring.

The goal of the program is to enable students to see mathematics principals in practical action. Workshop facilitator Phil Bedel says the lessons help fill the gap between what students are learning in math classes and CTE classes. "You'll find that a big part of this process is using common terminology. If you ask a student about the Pythagorean Theorem they may not know what you're talking about, however when you show them how it works and the role it plays in building trades they realize they use it all the time in that class, it's just a matter of connecting what they're already learning in math class to how they apply it in building trades." The CTE



Math-in-CTE summer professional development workshop wraps up.

instructors will begin teaching their developed lesson plans this semester. They will come back for review and revision sessions in the Fall and Spring. If you'd like to participate in next year's Math-in-CTE Workshop contact Davis Moore at [dmoore@doe.in.gov](mailto:dmoore@doe.in.gov)

## Opportunities for Students

### Nuts,Bolts and Thingamajigs Foundation Scholarships

Through its manufacturing summer camps and scholarships, NBT is inspiring the next generation of manufacturers, welders, plumbers, carpenters and more ... one tinkerer at a time. Find out how your students can attend and get other resources at <http://www.nutsandboltsfoundation.org/Scholarships.cfm>



Nuts, Bolts, and Thingamajigs Foundation offers scholarships to students.

### Opportunity for Student with Solid Writing Skills

[Indiana Ready Mixed Concrete Association \(IRMCA\) Essay Contest](http://www.doe.in.gov/super/2010/08August/082010/documents/essay.pdf) is open to all high school students ages 16-18 at the beginning of the 2010-2011 school term. Entries must be postmarked by: **November 8, 2010**. IRMCA will submit names and addresses of all participants to colleges and universities for recruitment purposes. For more information visit

<http://www.doe.in.gov/super/2010/08August/082010/documents/essay.pdf>





A State Farm representative looks over the work of some SkillsUSA students back in March. Your school can apply for a Good Neighbor Grant through October

## Scholarship Opportunities

### State Farm Grants

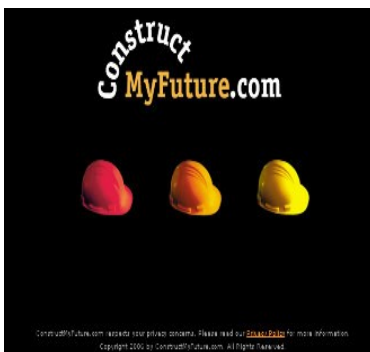
Good neighbor grants! State Farm funds nonprofits and schools for a wide range of activities including driving safety, personal financial literacy, community revitalization, K-12 teacher development, service-learning projects and economic development. Don't miss out on this exciting opportunity. The deadline to apply is October 31, 2010. For more information go to [http://www.statefarm.com/about/part\\_spos/grants/cogrants.asp](http://www.statefarm.com/about/part_spos/grants/cogrants.asp)

### Grainger Tools for Tomorrow Scholarship Program

Since 2006, the Grainger Tools for Tomorrow® scholarship program has helped technical education students across the country realize their educational goals and prepare for the workforce. The scholarship recognizes outstanding students with a \$2,000 scholarship for their second year of schooling. Students earning their associates degree or certificate in an industrial trade use this financial assistance for tuition and books

at select community colleges across the country. Once these students successfully complete their technical education program they also receive a customized Westward® toolkit. The scholarships are given out through local community colleges so contact your local Ivy Tech campus for more information.

*If you know of any scholarship opportunities and you'd like to share them submit them via e-mail to [dmoore@doe.in.gov](mailto:dmoore@doe.in.gov)*



Construct My Future Website offers resources for students and teachers in the construction industry.

## Online Resource Links

### Construct My Future

The Construct My Future web site presents a comprehensive link to information and materials for teachers, students, and parents about the construction industry. With resources for parents, students and teachers as well as grants, publications and scholarships, this resource is well worth looking into! <http://www.constructmyfuture.com>

### Architect 360 Website

On this Web site, students can design a house, walk through it in 3D, and then share it with the world. They can also learn more about architecture, past and present, and explore Frank Lloyd Wright's life OR Try the Design Studio Lite, where they can design a floor plan. You can find all of this online at <http://architectstudio3d.org/AS3d/index.html>



Architect 360 lets students design houses while they learn about architecture and design.



Teachers can get some of the supplies they need via the National Teacher Registry.

## Information for Teachers

### National Teacher Registry

The National Teacher Registry is a free service for schools and teachers that enables them to create a list of the items they need for their classrooms.

Teachers often buy supplies with their own money but there is a limit to what they can afford to purchase. The National Teacher Registry is a free service for teachers, parents

and/or other contributors. Products are sourced from national suppliers and discounters.

There is no markup. It is designed to allow teachers to let parents and others know about the supplies needed in the classroom. For more information visit the registry online at

<http://www.nationalteacherregistry.com/>

### Professional Development

IUPUI School of Education, offers a variety of dynamic and convenient summer professional development opportunities for teachers. E-mail [soeopd@iupui.edu](mailto:soeopd@iupui.edu) for additional information.

*If you have valuable information you think other teachers should know about. Tell us about it. Submit your ideas to [dmoore@doe.in.gov](mailto:dmoore@doe.in.gov)*

## Updates

### Career Pathways Initiative

IDOE's Career Pathways initiative is in full swing. Secondary and postsecondary instructors, industry representatives, and IDOE Curriculum Specialists are finalizing aligned sequences of secondary and, in most cases, postsecondary courses that lead to an industry-recognized credential or technical certification, or an associates or baccalaureate degree at an accredited postsecondary institution, or a registered apprenticeship.

Pathway teams have identified

all of the dual credit courses in the 16 phase one subject areas.

The teams will begin developing additional pathways in Phase two of the project which begins in October.

The Career Pathways initiative is a three year project. During that time 40 career pathways will be developed.

The phase I pathways were presented to area Career and Technical Directors during the IACTED Summer Conference.

You can view the career pathways and curriculum frameworks at the website below.

The IDOE will be talking about the developed pathways and the future of the program at this year's Indiana ACTE Fall Conference, September 24th and 25th at the Wyndham Hotel in Indianapolis (see the flyer on the next page for more information on this event).

<http://www.doe.in.gov/pathways/CareerPaths2010-PathwayPlans.html>



## Additional Resources/Upcoming Events

### Technical Education Magazine

Technical Education Magazine encourages, enlightens and inspires educators in the Technical, Technology, Industrial, Vocational, and Pre-Engineering Fields. You can find teaching resources, national standards, and exciting and engaging activities and opportunities for your students. Check them out online at <http://www.techedmagazine.com/home>

### Indiana ACTE Fall Conference

Mark your calendar for the Indiana ACTE Fall Conference. That happens September 24 and 25 at the Wyndham hotel in Indianapolis. The event is sponsored by Vincennes University. IDOE will be hosting sessions on Career Pathways and Academic Integration among other valuable workshops and training opportunities. Check out the flyer on the next page for the conference agenda and registration information.

### Professional Development

The Wabash Valley Education Center offers a number of professional development courses presented year round. For more information visit them at <http://www.esc5.k12.in.us/>



## Tidbits

### New T & I website

Be sure to visit IDOE's College and Career Preparation Division's new Trade and Industry Education website. You can find course descriptions, standards, articles of interest, and much more. You can also submit resource and topic requests for The Trade and Industrial Times at the site. Check it out at <http://www.doe.in.gov/octe/trdind/index.html>

### Animated Engines

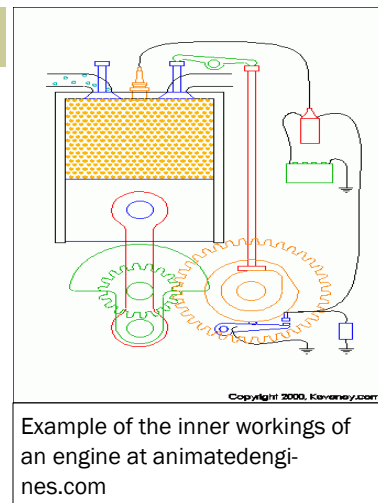
provides you with animated illustrations that show the inner workings of a variety of engines. Animated Engines features the inner workings of: Internal combustion engines, steam engines, Stirling engines And much more! These are great for illustrating the basic workings of engines. Visit the site below to find out more.

<http://www.animatedengines.com/>

### Atomic Learning's FREE Video Storyboard Pro

is designed to give teachers, students, and home movie makers a tool to plan ahead when creating video projects. You can access the free program at

<http://www.atomiclearning.com/k12/en/storyboardpro>



Example of the inner workings of an engine at [animatedengines.com](http://animatedengines.com)





## 2010 Indiana ACTE & ETEI State Conference



Sponsored By:

VINCENNES  
UNIVERSITY

### ***Career Pathways: A Journey To Success***

**September 24-25, 2010**

**Wyndham Hotel & Conference Center • Indianapolis, Indiana**

#### **Friday, September 24**

<b>8:30 a.m.</b>	<b>Registration Opens</b>
<b>10:00 a.m.</b>	<b>Opening Session &amp; Keynote</b> <i>Sponsored by ITT</i>
<b>11:00 a.m.</b>	<b>Pathways Presentation</b> <b>Department of Education</b>
<b>Noon</b>	<b>Lunch (Provided)</b>
<b>1:00-5:00 p.m.</b>	<b>Content Specific Sessions</b> <b>ETEI Sessions</b> <b>Affiliate Sessions</b> <b>General Sessions</b>
<b>2:00-7:00 p.m.</b>	<b>Vendors Open</b>
<b>5:00-7:00 p.m.</b>	<b>President's Reception</b> <b>Snacks/Drinks/Cash Bar</b>

#### **Saturday, September 25**

<b>6:30-8:30 a.m.</b>	<b>Breakfast - Hospitality Room</b>
<b>9:00 a.m.-Noon</b>	<b>Career Pathways Sessions</b> <i>Sessions to Address All of the 2010 Pathways Program Content and Completion Expectations.</i> <b>ETEI/Affiliate Sessions</b>
<b>Noon-1:30 p.m.</b>	<b>IACTE Awards Lunch</b> <b>ETEI Awards Lunch</b> <i>Sponsored by Vincennes University and Whitebox Learning</i>
<b>1:30 p.m.</b>	<b>IACTE Delegate Assembly</b>

**Mark Calendars & Make Plans Now To Attend The Fall Conference**  
**Sponsors/Events/Sessions/Activities Still Being Added & Finalized**  
**Pre-Conference Workshops & Programs TBA**

**Make Sure Instructors & Administrators Of CTE Programs**  
**Are Up To Date On The Career Pathways Initiatives**

**Special Thanks To:**



**WHITEBOX**  
LEARNING

**ITT Technical Institute**



**Substitute Teacher Pay Reimbursement Available**